

I chose the theme of my diploma thesis “Foods that prevent cancer” based on my long-term interest in this subject. I have always been interested in food and after starting my medical degree I have become more and more interested in the healthy aspect of the various fruits and vegetables we have today. Since it is widely known that food has a major influence on our health it is surprising to me why not more people care about their diet. As a medical student practicing in the faculty hospital of Charles University I have witnessed a large number of patients with various diseases-among them cancer- who both by their appearance and history have revealed an extremely poor diet.

In the modern society of today where we have an almost unlimited access to all kinds of foods there should have been more awareness among people about what to eat and what not to eat. However it must be emphasized that there are many different factors that influence people’s choice of food like nationality, traditions, education and socioeconomic status. For example if a child has grown up in a family where the diet consists mostly of fat and carbohydrates it is most likely that this child will continue to eat this kind of food. And if the fruit and vegetables are sold at a high price it is unlikely that persons with low incomes will spend money on this. Another thing to stress is that not all the foods we consider as “healthy” actually have that many benefits. A cucumber for example is healthy to eat but a tomato contains completely different health gaining molecules. So by choosing specific foods with a different composition of health promoting compounds we can prevent diseases like cancer.

Cancer is a disease of genes. However, both epidemiological and experimental evidence shows that only a small proportion of cancers are inherited. Environmental factors are most important and can be modified. These include smoking, infectious agents, radiation, industrial chemicals and pollution, medication and food. Over the long human lifespan our genes are vulnerable to mutations and nutritional factors are important in determining the likelihood of some of these mutations.<sup>1</sup>

This thesis will therefore focus on the fruits, vegetables, drinks and spices that have cancer fighting properties.